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**ABSTRACT** 

Briefly, in accordance with one embodiment of the invention, a method of routing a packet of binary digital signals through a network includes the steps of: receiving at a switch in the network the packet of binary digital signals as encoded binary digital signals including encoded binary digital signals used to route the packet through the network; and copying the encoded binary digital signals used to route the packet through the network, at least for decoding the encoded binary digital signals.

Briefly, in accordance with another embodiment of the invention, a method of routing a packet of binary digital signals through a network includes the steps of: receiving at a switch in the network the packet of binary digital signals as encoded binary digital signals including encoded binary digital signals specifying a route through the network without decoding.

Briefly, in accordance with one more embodiment of the invention, an integrated circuit includes: a switch adapted to receive a packet of binary digital signals as encoded binary digital signals including encoded binary digital signals used to route the packet through the network. The switch is further adapted to copy the encoded binary digital signals used to route the packet through the network, at least for decoding the encoded binary digital signals.

Briefly, in accordance with yet another embodiment of the invention, an integrated circuit includes: a switch adapted to receive a packet of binary digital signals, the packet of binary digital signals including encoded binary digital signals specifying a route through a network without decoding.

Briefly, in accordance with yet one more embodiment of the invention, an integrated circuit includes: a route unit adapted to produce binary digital signals to be included in a packet of binary digital signals that after encoding specify a route through a network without decoding.